**Attachment Two**

**Technical Requirements Traceability Matrix**

**Request for Proposal Number 6097 Z1**

Bidders are instructed to complete a Technical Requirements Traceability Matrix Operating Leased Automated Pharmacy Dispensing Machines Solution. Bidders are required to describe in detail how their proposed solution meets the conformance specification outlined within each Technical Requirement.

The traceability matrix is used to document and track the project requirements from the proposal through testing to verify that the requirement has been completely fulfilled. The winning Bidder will be responsible for maintaining the contract set of Baseline Requirements. The traceability matrix will form one of the key artifacts required for testing and validation that each requirement has been complied with (i.e., 100% fulfilled).

The traceability matrix should indicate how the Bidder intends to comply with the requirement and the effort required to achieve that compliance. It is not sufficient for the Bidder to simply state that it intends to meet the requirements of the RFP. DHHS will consider any such response to the requirements in this RFP to be non-responsive. The narrative should provide DHHS with sufficient information to differentiate the Bidder's technical solution from other Bidders' solutions.

The Bidder must ensure that the original requirement identifier and requirement description are maintained in the traceability matrix as provided by DHHS. Failure to maintain these elements may be grounds for disqualification.

How to complete the traceability matrix:

| Column Description | Bidder Responsibility |
| --- | --- |
| Req # | The unique identifier for the requirement as assigned by DHHS, followed by the specific requirement number. This column is dictated by this RFP and should not be modified by the Bidder. |
| Requirement | The statement of the requirement to which the Bidder should respond. This column is dictated by the RFP and must not be modified by the Bidder. |
| (1) Comply | The Bidder should insert an "X" if the Bidder's proposed solution complies with the requirement. Describe in the response how the Bidder's proposed solution meets the requirement. The Bidder should leave blank if the Bidder's proposed solution does not comply with the requirement.If left blank, the Bidder should also address the following:• Capability does not currently exist in the proposed system, but is planned in the near future (within the next few months)• Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the Bidder's standard capability• Requires an extensive integration effort of more than 500 hours |
| (a) Core | The Bidder should insert an "X" if the requirement is met by existing capabilities of the core system or with minor modifications or configuration to existing functionality. |
| (b) Custom | The Bidder should insert an "X" if the Bidder proposes to custom develop the capability to meet this requirement. Indicate "custom" for those features that require substantial or "from the ground up" development efforts. |
| (c) 3rd Party | The Bidder should insert an "X" if the Bidder proposed to meet this requirement using a 3rd party component or product (e.g., a COTS vendor, or other 3rd party). The Bidder should describe the product, including product name, its functionality and benefits in their response. |

**TECHNICAL REQUIREMENTS**

The following requirements describe what is needed to support DHHS technical project operations.

Each requirement is identified by the following first three characters:

|  |  |
| --- | --- |
| TEC | General Technical Requirements |
| STN | Standards Requirements |
| ERR | Error Handling Requirements |
| BKP | Backup and System Recovery Requirements |
| SEC | Security Requirements |
| INT | Interfaces/Imports/Exports Requirements |
| TST | Testing Requirements |

***General Technical Requirements***

This section presents the overall technical requirements that apply to the software. Describe in the Response how the proposed solution meets the requirement.

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| TEC-1 | If the proposed solution is hosted by the State describe how it will be supported using virtual servers |  |  |  |  |
| Response: |
| TEC-2 | Describe any third party components that are proposed as part of the solution, i.e. using Crystal Reports as a reporting tool. |  |  |  |  |
| Response: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TEC-3 | Describe the software licensing model of the proposed solution, including any required third party licensing.  |  |  |  |  |
| Response: |
| TEC-4 | Describe how the proposed solution’s upgrade and maintenance process minimizes downtime and impact to the users. |  |  |  |  |
| Response: |
| TEC-5 | Describe any redundancy built into the proposed servers or databases to limit any downtime in the Bidders proposed solution. |  |  |  |  |
| Response: |
| TEC-6 | Describe how the proposed solution has the ability to share data securely, including importing and exporting of data to/from other application software tools. |  |  |  |  |
| Response: |
| TEC-7 | Describe how the proposed solution has the ability to archive data per DHHS's required record retention schedules.  |  |  |  |  |
| Response: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TEC-8 | Describe how the proposed solution has the ability to generate reports and ad hoc queries without performance impact to user access or system response time. |  |  |  |  |
| Response: |
| TEC-9 | Describe how the Bidder's proposed solution provides an auto archive/purge of the log files to prevent uncontrolled growth of the log and historical records storage using administrator-set parameters. |  |  |  |  |
| Response: |

***Standards Requirements***

DHHS currently operates its computer system in compliance with many technology and operational standards. These standards originate from internal development, industry best practices and governmental mandates. The Bidder should describe how all applications provided by the Bidder operate in compliance with these standards and practices.

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| STN-1 | Describe how the Bidder's proposed solution complies with digital signature requirements described in the Nebraska Digital Signatures Act. Refer to <http://www.sos.ne.gov/rules-and-regs/regsearch/Rules/Secretary_of_State/Title-437.pdf> for definition and standards in Nebraska. |  |  |  |  |
| Response: |
| STN-2 | Describe how the Bidder's proposed solution conforms to the sub-parts of Section 508 of the Americans with Disabilities Act (ADA), and any other appropriate State or federal disability legislation. Refer to <http://www.ada.gov/508/>. |  |  |  |  |
| Response: |
| STN-3 | If the solution requires client software to be installed, describe how the Bidder's proposed solution assures that all software used for the solution can be distributed, installed and configured in an unattended "silent" manner. |  |  |  |  |
| Response: |
| STN-4 | Current DHHS policies prevent users from making administrative changes and downloading software locally to their PC. Describe how the Bidder's proposed solution supports this policy. |  |  |  |  |
| Response: |
| STN-5 | Current DHHS policies recommend not storing any data locally in the event that a user's desktop PC needs to be reimaged (which deletes locally stored data). Describe how the Bidder's proposed solution supports this policy. |  |  |  |  |
| Response: |
| STN-6 | Describe how the Bidder's proposed solution maintains licensed software, including all third-party software, no more than two supported versions behind the latest release and is the version supported by DHHS. |  |  |  |  |
| Response: |
| STN-7 | Describe how the Bidder's proposed solution is available online 24 hours a day and 7 days a week, 99.9% of the time each month. |  |  |  |  |
| Response: |
| STN-8 | Describe the Bidders responsibilities to address an error or application deficiency versus what actions are required of the state to minimize or resolve application errors. |  |  |  |  |
| Response: |
| STN-9 | Provide the Server requirements and a proposed configuration/server environment diagram if the proposed solution is a State self-hosted solution. |  |  |  |  |
| Response: |

***Error Handling Requirements***

The management of the system requires that all occurrences of errors be logged for review and that critical errors be accompanied by appropriate alerts. Authorized users need to be able to query and review the error log and configure the alerts.

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| ERR-1 | Describe the Bidder's proposed Error Handling functionality. |  |  |  |  |
| Response: |
| ERR-2 | Describe how the Bidder's proposed solution provides a comprehensive set of edits at the point of data entry to minimize data errors and provide immediate feedback in order for incorrect data to be corrected before further processing (e.g., spell check). |  |  |  |  |
| Response: |
| ERR-3 | Describe how the Bidder's proposed solution allows for a user to view, filter, sort, and search a comprehensive error log. |  |  |  |  |
| Response: |
| ERR-4 | Describe how the Bidder's proposed solution includes a comprehensive list of error messages with unique message identifiers. |  |  |  |  |
| Response: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ERR-5 | Describe how the Bidder's proposed solution displays errors to the user/operator in real-time whenever an error is encountered. |  |  |  |  |
| Response: |
| ERR-6 | Describe how the Bidder's proposed solution has the ability to suppress error messages based upon user-defined criteria. |  |  |  |  |
| Response: |

***Backup and System Recovery Requirements***

DHHS requires the ability to create backup copies of the software and to restore and use those backup copies for the basic protection against system problems and data loss. This requirement refers to all application system files, data files, and database data files. The Bidder's proposed solution should provide a comprehensive and easily manageable backup and recovery process that is responsive to DHHS needs.

The Bidder's proposed solution should identify and implement a system recovery plan that ensures component failures do not disrupt services. The plan should be completed, implemented, and tested prior to system implementation.

The successful Bidder's solution should specify all needed hardware, software, and tools, and the plan should clearly define all roles, responsibilities, processes, and procedures. The solution should be sufficiently flexible to integrate with existing DHHS capabilities and accommodate future changes.

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| BKP-1 | Describe the Bidder's proposed Backup and System Recovery plan. Include all needed hardware, software, and tools, and clearly define all roles, responsibilities, processes and procedures. Describe the Bidder's proposed backup retention schedules – daily, weekly, monthly, quarterly, etc. |  |  |  |  |
| Response: |
| BKP-2 | Describe the Bidder's proposed Disaster Recovery Plan. Include all needed hardware, software, and tools, and clearly define all roles, responsibilities, processes and procedures. |  |  |  |  |
| Response: |
| BKP-3 | Describe how backups of the Bidder's proposed solution are able to be scheduled outside of normal working hours and without user intervention. |  |  |  |  |
| Response: |
| BKP-4 | Describe what formats the database can be extracted to in the case the state needs to work with the data in a different environment or if the current contract were to terminate and the state will need to extract the data. |  |  |  |  |
| Response: |

***Security and Audit Requirements***

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| SEC-1 | Describe the Bidder's proposed security safeguards integrated into their application and how these safeguards address DHHS security.Refer to DHHS Information Technology (IT) Access Control Standard (DHHS-2013-001-b) for specific requirements:[http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20(IT)%20Security%20Policies%20and%20Standards.pdf](http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20%28IT%29%20Security%20Policies%20and%20Standards.pdf) |  |  |  |  |
| Response: |
| SEC-2 | Describe how the Bidder's proposed solution complies with Federal, State, and division-specific security requirements including but not limited to:* Health Insurance Portability and Accountability Act (HIPAA) of 1996
* Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009
* Nebraska Electronic Signature Statute <http://www.nebraskalegislature.gov/laws/statutes.php?statute=86-611>
* Privacy Act of 1974
* 45 CFR 85 Security standards for PHI
* Office of the National Coordinator's Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health information <https://www.healthit.gov/sites/default/files/nationwide-ps-framework-5.pdf>

Refer to the Nebraska DHHS Information Systems and Technology Security Policies and Standards for more information (<http://dhhs.ne.gov/Pages/fin_ist_policies.aspx>).  |  |  |  |  |
| Response: |
| SEC-3 | Describe how the Bidder's proposed solution meets the DHHS requirements for unique user ID access. Include:* Specification on configuration of the unique user ID.
* How the unique user ID is assigned and managed.
* How the unique user ID is used to log system activity.
* How the system handles the creation of duplicate user ID accounts.
 |  |  |  |  |
| Response: |
| SEC-4 | Describe how the Bidder's proposed solution meets the DHHS standard for administering passwords:* Initial Password assignment.
* Strong Password Requirements.
* Password reset process.
* Password expiration policy.
* Password controls for automatic lockout access to any user or user group after an administrator-defined number of unsuccessful log-on attempts.
 |  |  |  |  |
| Response: |
| SEC-5 | Describe how the Bidder's proposed solution meets the requirements for unique system administration access. Include:* Specification on configuration of the unique system administration ID.
* How the unique system administration ID is assigned and managed.
* How the unique system administration ID is used to log system activity.
 |  |  |  |  |
| Response: |
| SEC-6 | Describe how the Bidder's proposed solution provides the ability to maintain a directory of all personnel who currently use or access the system. |  |  |  |  |
| Response: |
| SEC-7 | State of Nebraska requires authentication and authorization of users through an enterprise directory known as the Nebraska Directory Services (NDS) to access web-based applications. Describe how the Bidder's proposed solution will integrate NDS authentication.Refer to the Nebraska Information Technology Commission Security Architecture – Authentication and Authorization – Identity and Access Management Standard for State Government Agencies (8-302) for specific requirements:<http://nitc.nebraska.gov/standards/8-302.html> |  |  |  |  |
| Response: |
| SEC-8 | Describe how the Bidder's proposed solution protects Confidential and Highly Restricted Data from unauthorized access during transmission. Describe transmission safeguards that are integrated into the proposed system to protect data during transmission, including any encryption technology.Refer to DHHS Information Technology (IT) Security Policy (DHHS-2013-001) for specific requirements:[http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20(IT)%20Security%20Policies%20and%20Standards.pdf](http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20%28IT%29%20Security%20Policies%20and%20Standards.pdf) |  |  |  |  |
| Response: |
| SEC-9 | Describe how the Bidder's proposed solution provides System Auditing functions, including but not limited to:* The user ID of the person who made the change.
* The date and time of the change.
* The physical, software/hardware and/or network location of the person while making the change.
* The information that was changed.
* The outcome of the event.
* The data before and after it was changed, and which screens were accessed and used.

Refer to DHHS Information Technology (IT) Audit Standard (DHHS-2013-001-F) for specific audit requirements:[http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20(IT)%20Security%20Policies%20and%20Standards.pdf](http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20%28IT%29%20Security%20Policies%20and%20Standards.pdf) |  |  |  |  |
| Response: |
| SEC-10 | If the proposed system processes Confidential and Highly restricted Data, describe the Bidder's auditing functions for all data that is accessed and viewed, regardless of whether the data was changed. Describe the auditing functions which should include but is not limited to:* The user ID of the person who viewed the data.
* The date and time of the viewed data.
* The physical, software/hardware and/or network location of the person viewing the data.
* The information that was viewed.

Refer to DHHS Information Technology (IT) Audit Standard (DHHS-2013-001-F) for specific audit requirements:[http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20(IT)%20Security%20Policies%20and%20Standards.pdf](http://dhhs.ne.gov/IT%20Policies/Information%20Technology%20%28IT%29%20Security%20Policies%20and%20Standards.pdf) |  |  |  |  |
| Response: |
| SEC-11 | If the Bidder's proposed solution has the ability to override edits, describe how the solution audits all overridden edits and identifies information including, but not limited to, the login ID, date, and time. |  |  |  |  |
| Response: |
| SEC-12 | Describe how the Bidder's proposed solution produces daily audit trail reports and allows inquiries, showing updates applied to the data. |  |  |  |  |
| Response: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SEC-13 | Describe how the Bidder's proposed solution supports encryption of data at rest or an equivalent alternative protection mechanism. Describe the proposed encryption of data. If data is not encrypted, describe in detail compensating controls. |  |  |  |  |
| Response: |
| SEC-14 | Describe how the Bidder's proposed solution adheres to the principle of "Fail Safe" to ensure that a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks. |  |  |  |  |
| Response: |
| SEC-15 | Describe how the Bidder's proposed solution recognizes Confidential and Highly Restricted information in screens, reports and views (i.e. PHI and SSN). Restrict distribution and access based upon system security settings and roles. Include warnings on printed and viewed reports. |  |  |  |  |
| Response: |
| SEC-16 | Describe how the Bidder's proposed solution alerts staff authorities identified by DHHS of potential violations of security and privacy safeguards. Incidents that involve or could potentially involve Confidential or Highly Restricted data must be reported immediately as defined in [DHHS Policy DHHS-2018-001-E *DHHS IT Incident Management Standard*.](http://dhhsemployees/Policy%20Documents/DHHS-IT-2018-001E%20IT%20Incident%20Management%20Standard.pdf) |  |  |  |  |
| Response: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SEC-17 | Describe how the Bidder's proposed solution provides a process for archiving and/or destroying data and sanitizing storage media in conformance with DHHS and Division data governance policies and subject to applicable HIPAA, and federal (e.g., Federal Information Processing Standards (FIPS), National Institutes of Standards and Technology (NIST), and State laws. |  |  |  |  |
| Response: |
| SEC-18 | Describe how the Bidder’s proposed solution is compliant with the Federal Information Security Act (FISMA).  |  |  |  |  |
| Response: |
| SEC-19 | Describe how the Bidder's proposed solution provides the capability to identify and report on unauthorized attempts to information in the system, based on user-defined criteria. |  |  |  |  |
| Response: |
| SEC-20 | Describe how the Bidder's proposed solution supports removal of a user's privileges without deleting the user from the solution to ensure a history of user's identity and actions. |  |  |  |  |
| Response: |

***Interfaces/Imports/Exports Requirements***

The proposed software solution is expected to be able to interface with other computer systems as necessary.

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| INT-1 | Describe the Bidder's proposed automated approach to managing interfaces. |  |  |  |  |
| Response: |
| INT-2 | Describe how the Bidder's proposed solution has the capability to notify System Administrators/ system support staff if an interface is not available for any reason. |  |  |  |  |
| Response: |
| INT-3 | If needed, describe how the Bidder's proposed solution supports data exchanges between components in real-time so that data is always synchronous across the entire solution, including any third-party components. |  |  |  |  |
| Response: |
| INT-4 | Describe how the Bidder's proposed solution conducts end-to-end testing with interface partners both external and internal to ensure requirements are met. |  |  |  |  |
| Response: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| INT-5 | Describe how the Bidder's proposed solution has or will be able to interface with the state’s current pharmacy system Rx-Connect. |  |  |  |  |
| Response: |

***Testing Requirements***

The proposed software solution is expected to be tested to ensure the machines function through a complete process to include interfaces, data transmission, and all hardware parts function as designed.

| **Req #** | **Requirement** | (1)Comply | (a)Core | (b)Custom | (c)3rd Party |
| --- | --- | --- | --- | --- | --- |
| TST-1 | Bidder should submit a testing plan that will be conducted on ADMs following installation. Testing should include but not be limited to a routine to ensure the following function properly and as designed: 1. Interfaces: provide an example of the common steps used to test the common interfaces used as part of the solution being proposed.
2. Data transmission: provide an example of the steps taken to verify that data that is transmitted between the ADM application and the current pharmacy system will be tested to ensure that all data is sent and received is accurate.
3. All hardware parts: provide an example of how technical hardware such as routers or servers are tested to ensure that they are functioning and working to support data transmissions and that all machines are functioning to support the complete process.
 |  |  |  |  |
| Response: |